ABSTRACT OF THE DISCLOSURE

[0100] The present invention provides, in one embodiment, a multi-level service model operating system environment that may be partitioned into a global zone and one or more non-global zones to isolate processes from processes executing in association with other non-global zones under control of a single kernel instance. In one embodiment, the multi-level service model includes a virtual platform layer and an application layer. The virtual platform layer may include services and resources for supporting the zones, which can be made accessible to the zones in the form of a virtual platform. The application layer may comprise the non-global zones, including an application environment for maintaining a runtime state for the zone's processes and any zone-constructed objects, such as network connections and shared memory segments. In one embodiment, control and management of non-global zones can be provided by a system of states and transitions.